

## CLAIMS

What is claimed is:

5 1. A method for operating a test automation facility in a data processing system, the method comprising:

loading an initial markup language document into a browser application at a client, wherein the initial markup language document initializes a set of browser frames; and

executing scripting language statements within a first frame to verify contents of a second markup language document within a second frame.

15 2. The method of claim 1 further comprising:

loading the second markup language document into the second frame after receiving the second markup language document from a server within the data processing system.

20 3. An apparatus for operating a test automation facility in a data processing system, the apparatus comprising:

first loading means for loading an initial markup language document into a browser application at a client, wherein the initial markup language document initializes a set of browser frames; and

executing means for executing scripting language statements within a first frame to verify contents of a second markup language document within a second frame.

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- The apparatus of claim 3 further comprising: second loading means for loading the second markup language document into the second frame after receiving the second markup language document from a server within the data processing system.
- 5. A computer program product in a computer readable medium for use in a data processing system for operating a test automation facility, the computer program product comprising:

instructions for loading an initial markup language document into a browser application at a client, wherein the initial markup language document initializes a set of browser frames; and

instructions for executing scripting language statements within a first frame to verify contents of a second markup language document within a second frame.

The computer program product of claim 5 further comprising:

instructions for loading the second markup language document into the second frame after receiving the second markup language document from a server within the data processing system.

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7. A method for operating a test automation facility in a data processing system, the method comprising:

loading an initial markup language document into a browser application at a client, wherein the initial markup language document comprises a set of frames;

loading a second markup language document within a first frame of a browser application window, wherein the second markup language document comprises scripting language statements;

loading, within a second frame of the browser application window, a third markup language document that was received from a server in response to a request initiated by a user;

in response to loading the third markup language document, calling a function in scripting language statements within the first frame; and

verifying contents of the third markup language document using the called function.

- 20 8. The method of claim 7 further comprising:
  receiving user-selected actions through user
  interface controls presented within the first frame of
  the browser application window.
- 25 9. The method of claim 8 further comprising: receiving user-specified test parameters through the user interface controls.

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10. The method of claim 7 further comprising:

repeating, for a user-specified duration or loop count, the step of loading the third markup language document into the second frame of the browser application window, wherein the Uniform Resource Identifier (URI) of the third markup language document is associated with the called function.

11. The method of claim 7 further comprising, prior to calling the function:

detecting a directive in the third markup language document that directs the browser application to call the function.

- 15 12. The method of claim 7 further comprising: logging messages into a third frame of the browser application window.
  - 13. The method of claim 7 wherein the scripting language is JavaScript.
  - 14. The method of claim 7 wherein the markup language is Hypertext Markup Language.

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15. An apparatus for operating a test automation facility in a data processing system, the apparatus comprising:

means for loading an initial markup language document into a browser application at a client, wherein the initial markup language document comprises a set of frames:

means for loading a second markup language document within a first frame of a browser application window, wherein the second markup language document comprises scripting language statements;

means for loading, within a second frame of the browser application window, a third markup language document that was received from a server in response to a request initiated by a user;

means for calling, in response to loading the third markup language document, a function in scripting language statements within the first frame; and

means for verifying contents of the third markup language document using the called function.

- 16. The apparatus of claim 15 further comprising:

  means for receiving user-selected actions through
  user interface controls presented within the first frame
  of the browser application window.
- 17. The apparatus of claim 16 further comprising:

  means for receiving user-specified test parameters
  through the user interface controls.

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- 18. The apparatus of claim 15 further comprising:
   means for repeating, for a user-specified duration
  or loop count, the step of loading the third markup
  language document into the second frame of the browser
  application window, wherein the Uniform Resource
  Identifier (URI) of the third markup language document is
- 19. The apparatus of claim 15 further comprising,10 prior to calling the function:

associated with the called function.

means for detecting a directive in the third markup language document that directs the browser application to call the function.

- 15 20. The apparatus of claim 15 further comprising:

  means for logging messages into a third frame of the
  browser application window.
  - 21. The apparatus of claim 15 wherein the scripting language is JavaScript.
  - 22. The apparatus of claim 15 wherein the markup language is Hypertext Markup Language.

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- 23. A computer program product in a computer readable medium for use in a data processing system for operating a test automation facility, the computer program product comprising:
- instructions for loading an initial markup language document into a browser application at a client, wherein the initial markup language document comprises a set of frames:

instructions for loading a second markup language document within a first frame of a browser application window, wherein the second markup language document comprises scripting language statements;

instructions for loading, within a second frame of the browser application window, a third markup language document that was received from a server in response to a request initiated by a user;

instructions for calling, in response to loading the third markup language document, a function in scripting language statements within the first frame; and

instructions for verifying contents of the third markup language document using the called function.

- 24. The computer program product of claim 23 further comprising:
- 25 instructions for receiving user-selected actions through user interface controls presented within the first frame of the browser application window.
  - 25. The computer program product of claim 24 further comprising:

instructions for receiving user-specified test parameters through the user interface controls.

26. The computer program product of claim 23 further comprising:

instructions for repeating, for a user-specified duration or loop count, the step of loading the third markup language document into the second frame of the browser application window, wherein the Uniform Resource Identifier (URI) of the third markup language document is associated with the called function.

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27. The computer program product of claim 23 further comprising, prior to calling the function:

instructions for detecting a directive in the third markup language document that directs the browser application to call the function.

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28. The computer program product of claim 23 further comprising:

instructions for logging messages into a third frame of the browser application window.

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- 29. The computer program product of claim 23 wherein the scripting language is JavaScript.
- 25 30. The computer program product of claim 23 wherein the markup language is Hypertext Markup Language.